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To Specification:

Please amend the following paragraphs of the specification as follows.

[0006] The conventional backlight module generally includes a lamp tube, a reflection holder and a light guide plate (LGP). The light guide plate can transfer the line light source emitted by the lamp tube into surface light source. Generally, since the lamp tube is mounted on the edge of the light guide plate, the uniformity of the surface light source emitted by the light guide plate is worse. Therefore, a plurality of optical films, such as, diffuse films or brightness enhancement films is disposed above the light exit plane of the light guide plate. Therefore, the cost of the backlight module is expensive as the light guide plate and optical film are expensive. Moreover, the lamp tube, the reflector holder and the light guide plate are individual components and must be mounted by a glue trim. Therefore, the construction of the conventional backlight module is ~~complexand~~ complex and high-cost.

[0009] In the discharge process described above, the light emitted by the cold cathode fluorescent flat lamp (CCFFL) is generally constructed as a line light source. When the cold cathode fluorescent flat lamp (CCFFL) is provided as a surface light source, the light on the plane is not uniform. Therefore, a local discharge process is provided by, for example, providing a plurality of protrusions on the electrodes, and thus light is emitted by point ~~dischargeat~~ discharge at the protrusions. Hence, a cold cathode fluorescent flat

lamp (CCFFL) with a larger surface area may be constructed by a plurality of local plane lamps.

[0010] However, in the local discharge process, the light intensity at the point of discharge of the cold cathode fluorescent flat lamp (CCFFL) is larger than other areas, and therefore, an interlaced brightness distribution is formed in the surface of the light source. Therefore, a better brightness uniformity of the ~~(influence)?~~ cold cathode fluorescent flat lamp (CCFFL) is highly desirable.

[0011] Accordingly, the present invention is directed to a cold cathode fluorescent flat lamp for increasing the light intensity emitted from the region without point discharge to increase the ~~brightnessuniformity~~ brightness uniformity of the cold cathode fluorescent flat lamp.

[0012] In addition, the present invention is also directed to a cold cathode fluorescent flat lamp (CCFFL) for reducing the light intensity emitted by the region of point discharge to increase the ~~brightnessuniformity~~ brightness uniformity of the cold cathode fluorescent flat lamp.

[0013] According to an embodiment of the present invention, a cold cathode fluorescent flat lamp (CCFFL) comprising, for example but not limited to, a cavity, discharge gas, a plurality of electrodes, fluorescence layer and first light control layer is provided. The cavity has a light exit plane. The discharge gas is filled in the cavity, and the ~~electrodesmay~~ electrodes may be, for example but not limited to, disposed inside the cavity or outside the cavity. The fluorescence layer is disposed on the inner wall of the cavity. The first light control layer is disposed over the fluorescence layer corresponding

to the light exit plane of the cavity.

[0016] In one embodiment of the present invention, the electrodes of the cavity comprises, for example but not limited to, a plurality of protrusions. In another embodiment of the invention, the electrodes, for example but not limited to, divide the cavity into at least one sub-cavity, and the sub-cavity is divided by the protrusions of the electrodes into a plurality of first light emitting areas and second light emitting areas. The second light emitting areas are, for example but not limited to, disposed between the first light emitting areas. The first light control layers are disposed over the fluorescence ~~layercorresponding~~ layer corresponding to the first light emitting areas.

[0023] In one embodiment of the present invention, the cavity comprises a first substrate, a second substrate and a side bar. The second substrate is disposed over the first substrate, and the side bar is disposed between the first and the second ~~substrateand~~ substrate and connected to the edge thereof.

[0039] FIG. ~~1is~~ 1 is a perspective top view schematically illustrating a cold cathode fluorescent flat lamp (CCFFL) according to one embodiment of the present invention. FIG. 2 is a cross-sectional view along line I-I' of FIG. 1. Referring to FIG. 1 and FIG. 2, the cold cathode fluorescent flat lamp (CCFFL) ~~100comprises~~ 100 comprises, for example but not limited to, cavity 102, discharge gas 104, electrodes 106, fluorescence layers ~~108and~~ 108 and first light control layers 110. The cavity 102 may be, for example but not limited to, a cube comprising first substrate 112, second substrate 114, side bar 116 and light exit plane 118. The fluorescence layer ~~108is~~ 108 is disposed on the inner

wall of the cavity 102. In one embodiment of the present, the fluorescence layer 108 is, for example but not limited to, disposed on the first substrate 112 and the second substrate 114. The discharge gas 104 is filled in the cavity 102 and may be comprised of, for example but not limited to, xenon (Xe), neon (Ne), argon (Ar) or other inert gas.

[0040] Next, referring to FIG. 1, a plurality of electrodes 106 are disposed in the cavity 102. The cavity 102 may be divided into a plurality of sub-cavities 128 by the electrodes 106. To light up the cold cathode fluorescent flat lamp (CCFFL) 100, the suitable voltages are applied to the electrodes 106 to emit electrons, the discharge gas 104 inside the cavity 102 are impacted by the electrons, and thereby get ionized and excited into a plasma. Thereafter, the atoms of the plasma being in the excited state atom decay from the excited state to the ground state emitting ultraviolet light simultaneously. The emitted ultraviolet light will excite the fluorescence layer 108 on the inner wall of the cavity ~~102to~~ 102 to generate visible light.

[0041] It is noted that, the electrodes 106 may comprise, for example but not limited to, a plurality of protrusions 120, and thus every sub-cavity 128 is divided into, for example but not limited to, a first light emitting area ~~122and~~ 122 and a second light emitting area 124. Since the current between each pair of opposite protrusions 120 is larger, the intensity of the ultraviolet light emitted from the first light emitting area 122 is larger than that emitted from the second light emitting area 124. It is noted that, the light intensity emitted by the cold cathode fluorescent flat lamp (CCFFL) 100 is dependent on the

intensity of the ultraviolet light described above, and moreover, dependent on the amount of the fluorescence substance irradiated by the ultraviolet light in a time period.

[0042] Next, referring to FIG. 2, a first light control layer 110 is disposed above the fluorescence layer 108 corresponding to the light exit plane 118 and the first light emitting area 122 of FIG. 1. Therefore, the light transmittance near the first light control layer 110 is reduced, and the light intensity exited from the first light emitting area 122 may be close to that from the second light emitting area 124. Thus, the uniformity of the emitted light of the whole surface is enhanced. In one embodiment of the invention, the first light control layer 110 is, for example but not limited to, a patterned film layer composed of grating shape, dot shape or other applicable shape ~~withproper~~ with proper distribution density. The first light control layer 110 may be comprised of, for example but not limited to, a fluorescence material. In one embodiment of the invention, the material of the first light control layer 110 is same as that of the fluorescence layer 108. In addition, the first light control layer 110 is formed by, for example but not limited to, screen printing process.

[0043] It is noted that, in the embodiment described above, only one first light control layer 110 is provided. However, in the present invention, more than one light control layers may also be utilized to achieve the purpose of the present invention. In another embodiment of the present invention in, the first light control layer may be a multi-layer stacked patterned film layers, such as the first light control layer 210 shown in FIG. 2A.

Referring to FIG. 2A, the first light control layer 210 comprises patterned film layer ~~210aand~~ 210a and patterned film layer 210b. It is noted that, the other components in FIG. ~~2Aexcept~~ 2A except for the first light control layer 210 are similar to the components having the same reference number in FIG. 2, and therefore a detailed description thereof is omitted hereinafter.